

UNITED STATES PATENT APPLICATION
TITLE OF THE INVENTION

[0001] Mouldable Silicone Gel Composition

CROSS-REFERENCE TO RELATED APPLICATIONS

5 [0002] This application is a continuation-in-part application of application serial number 10/114,374, filed April 1, 2002, now abandoned.

STATEMENT REGARDING FEDERALLY

SPONSORED RESEARCH OR DEVELOPMENT

[0003] Not applicable.

10 **REFERENCE TO A MICROFICHE APPENDIX**

[0004] Not applicable.

FIELD OF INVENTION

[0005] This invention relates to a mouldable silicone gel composition for use in moulding operations utilizing a mould. More particularly, this invention relates to a
15 mouldable silicone gel composition that forms a low compression set silicone gel that exhibits an excellent mould releasability.

BACKGROUND OF THE INVENTION

[0006] It is to be understood that very "soft", mouldable silicone rubbers, which typically have high compression sets, may be referred to as silicone gels and the present
20 application will henceforth refer to such rubbers as silicone gels. Silicone gel compositions are used as, for example, sealants, filling and packing agents and protective agents because the silicone gels afforded by their cure exhibit excellent vibration absorbing capacity, electrical properties, heat resistance, and water resistance.

[0007] Silicone gels are, however, tacky and weak. When a silicone gel composition
25 is subjected to moulding in a mould, the resulting silicone gel will stick strongly to the mould and will rupture when forcibly peeled there from. In addition, silicone gels exhibit a large compression set and have trouble recovering their shape when an applied compression stress is released after long term application.

[0008] JP 06-166822 describes an ozone resistant silicone gel composition used as a
30 filling or sealing material for electrical devices comprising 100 parts by weight of an organopolysiloxane having at least two alkenyl groups in each molecule, an organopolysiloxane having at least two silicon-bonded hydrogen atoms in each molecule, in an amount such that the molar ratio of silicon bonded hydrogen atoms to alkenyl groups is